Abstract

Deep reactive ion etching creates a single mask MEMS structure 20 -50 ηm deep on the top surface of a wafer. Thereafter, a bottom surface etch cooperates with trenches formed in the MEMS structure to provide through trenches which release large area structures of arbitrary shape and having a thickness up to that of the wafer. The released structure is supported in the wafer by MEMS support beams and motion is detected and affected by MEMS sensors and actuators, respectively.